2003 Water Quality Data for Shandon

Tables 1,2,3,4, 5, and 6 list all of the drinking water contaminants that were detected from January 2003 through December 2003, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. The DHS requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data may be more than one year old, but is still representative of the water quality.

Table 1 – Microbiological Contaminants					
Contaminant (reporting units)	**MCL**	**PHG (MCLG)**	**Range**	**Average**	**Potential Source of Contamination**
Total Coliform Bacteria (MPN/100mL) (Distribution System)	More than 1 sample in a month with a detection	(0)	ND	ND	Naturally present in the environment
Heterotrophic Plate Count (CFU/mL) (Distribution System)	-----	(0)	ND—2	ND	Naturally present in the environment
Table 2—Detection of Contaminants with a PRIMARY Drinking Water Standard					
Barium (ppb)	1000	(2000)		120 (2002)	Erosion of natural deposits
Fluoride (ppb)	2000	1000		200 (2002)	Erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	15	-----	ND—3.1	2.2 (2000-3)	Erosion of natural deposits
Nitrate as NO3 (ppm)	45	45	12—13	12	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Table 3 – Detection of Contaminants with a SECONDARY Drinking Water Standard					
Chloride (ppm)	500	-----	50—68	59	Runoff/leaching from natural deposits
Color (CU) *(Distribution & Wells)*	15	-----	ND—5	ND	Naturally occurring organic materials
Corrosivity (LI)	Noncorrosive	-----	0.3—0.4 Noncorrosive	0.4	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Odor – Threshold (TON) *(Distribution & Wells)*	3	-----	0—1.7	1	Naturally occurring organic materials
Specific Conductance (micromhos/cm)	1600	-----	510—580	540	Runoff/leaching from natural deposits
Turbidity (NTU) (Distribution System & Wells)	5	-----	0.04—4.2	0.16	Soil runoff
Total Dissolved Solids (mg/L)	1000	-----	340—390	360	Runoff/leaching from natural deposits
Sulfate	500	-----	58—63	60	Runoff/leaching from natural deposits

Table 4—Detection of Lead and Copper in Shandon Homes							
Contaminant (reporting units)	MCL	MCLG	Number of Samples Collected	Date Collected	90th Percentile Level Detected	Number of Sites found above the AL	Potential Source of Contamination
Lead (ppb)	AL = 15	2	10	9/2002	ND	0	Internal corrosion of household water plumbing systems
Copper (ppb)	AL = 1300	170	10	9/2002	87	0	Internal corrosion of household water plumbing systems

Table 5 – Detection of Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors—Distribution System					
Contaminant (reporting units)	**MCL**	**PHG (MCLG) [MRDLG]**	**Range**	**Average**	**Potential Source of Contamination**
Chlorine (ppm) *(Distribution)*	MRDL = 4.0 (as Cl2)	MRDLG = 4 (as Cl2)	1.15—1.88	1.49	Drinking water disinfectant added for treatment.
Table 6 – Detection of Unregulated Contaminants					
Alkalinity as $CaCO_3$ (ppm)	-----	-----	120—130	120	Runoff/leaching from natural deposits; seawater influence
Boron (ppb)	AL = 1000	-----	83—120	100 (2002)	State regulations require us to monitor this contaminant while the State considers setting a limit on it.
Calcium (ppm)	-----	-----	66—71	68	Runoff/leaching from natural deposits; seawater influence
Chromium VI (ppb) (Hexavalent chromium)	-----	-----	1.0—1.1	1.1 (2002)	Erosion of natural sources; discharge from steel and pulp mills and chrome plating
Hardness (ppm)	-----	-----	-----	190	Generally found in ground and surface water
Magnesium (ppm)	-----	-----	3.3—4.8	4.1	Runoff/leaching from natural deposits; seawater influence
pH	-----	-----	7.91—7.92	7.92	Runoff/leaching from natural deposits; seawater influence
Sodium (ppm)	-----	-----	42—45	44	Runoff/leaching from natural deposits; seawater influence
Vanadium (ppb)	AL = 50	-----	ND—5.4	3.9 (2002)	State regulations require us to monitor this contaminant while the State considers setting a limit on it.